

Maintenance: Exerpt from 2002 Annual Report

S5.B.8.c. Operation and Maintenance of Municipal Storm Sewers

Permit Requirement

Operation and maintenance programs for new and existing stormwater facilities owned or operated by the permittee, and an ordinance requiring and establishing responsibility for operation and maintenance of other stormwater facilities that discharge into municipal separate storm sewers owned or operated by the permittee. The programs shall include a strategy for addressing the disposal of street waste, decant, and cooperative efforts with Ecology and other entities to develop decant solutions.

Summary of Compliance Activities

Public Works' Operations Division maintains all county-owned storm sewers and roadside ditches. Private facilities and storm sewer systems are maintained by the owner or operator. The Stormwater Facility Maintenance Manual adopted by reference under Chapter 13.26A CCC has standards and practices for maintaining both public and private storm sewer systems. The county owns and operates a decant facility which also serves other governments' maintenance programs.

County Storm Sewer Maintenance

During 2002, Clark County operated and maintained storm sewers according to schedules and standards established for the approved NPDES stormwater management program. The Stormwater Facility Maintenance Manual includes source control, erosion control, and vegetation management standards and practices which apply to all private and public stormwater facilities. In addition, the Water Quality BMP Manual for Operation and Maintenance of Publicly Owned Property includes source control, erosion control, and vegetation management standards and practices for activities that maintain roads, stormwater facilities, public facilities, and park lands.

Swale Condition Inventory

During 2002, Water Resources Capital Program performed a project to inventory the condition of about 270 biofiltration swales and detention ponds. Each site was visually inspected to observe and note function and condition. Each site was documented with digital photographs. Facilities were evaluated for grass quality and coverage, channeling, sediment build-up and ponding. Sites with channeling problems are under review for possible repair alternatives. Sites needing immediate repair were referred to Operations and Maintenance for corrective actions. This project implements storm sewer facility maintenance requirements under Chapter 13.26A of the County Code.

2002 Stormwater Facility Maintenance Compliance Measures

Facility/Activity	NPDES-Required Activity	Performance Measures	Number of Activity
Catch basins	Inspect 1x/yr clean following maintenance standards	# catchbasins owned by CC # catchbasins inspected # catchbasins cleaned percent catchbasins cleaned	Approx. 6700 all inspected 6714 cleaned 100 percent cleaned

Manholes	Inspect 1 x/yr clean following maintenance standards	# manholes owned # manholes inspected # manholes cleaned percent cleaned	Approx. 2400 all inspected 18 cleaned 1 percent
Drywells	Inspect /clean every 3-5 years	# drywells owned # drywells inspected # drywells cleaned percent cleaned	Approx. 900 all inspected 33 4 percent
Detention/Retention facilities	Mow 3 or 4 x/yr or maintain vegetation as natural	# R/D facilities owned # mowings # other maintenance done percent compliance	161 513 all weeded 100 percent
Biofiltration Swales	Mow 3 or 4 x/yr other activities as per manual	# swales owned # times swales mowed description of other activity percent compliance	334 4 times cleaned/weeded 100 percent
Spill Response-stormwater facilities	Procedures in place	# of kits in vehicles # of vehicles percent of vehicles w/spill kits # of spills reported to Ecology	158 170 93 percent -
Storm Sewer Pipe	Inspect/maintain as necessary	# feet cleaned	7,650
Maintenance Tracking	Use computer based system to track activities	Activity Tracking Database still in use	

Maintenance Tracking System

The county currently uses a Microsoft Access® database to track maintenance activities for the permit.

Private Stormwater Systems Inspection

Public Works has an inspector who has the job of checking all private storm sewer facilities for compliance with maintenance standards.

Public Works stormwater education staff inspects sites that are more likely to require source controls and provides source control technical assistance.

2002 Compliance Measures for Private Storm Sewer Maintenance and Source Controls

Number	Reporting Item
374	Private stormwater systems had maintenance inspections
332	Private stormwater systems meeting maintenance requirements
27	Private stormwater systems not meeting maintenance requirements
2	Private stormwater systems referred/provided maintenance info/education
103	Private stormwater systems had source control inspections
22	Private stormwater systems meeting source control requirements
81	Private stormwater systems not meeting source control requirements
103	Private stormwater systems referred/provided source control info/education
2	Private stormwater systems referred to Code Enforcement for source control

Decant Facility Operation

Clark County operates a storm sewer sludge decant facility to manage materials pumped from catch basins, drywells, and other storm sewer components. Liquids are treated and discharged to small, clay-lined retention ponds, which can be emptied to the sanitary sewer. Solids are managed and disposed of, or reclaimed under a solid-waste handling permit issued by the Southwest Washington Health District. The City of Vancouver and WSDOT also use the facility. Other Clark County municipalities have the option of contracting to use the facility.

S5.B.8.d. Operation and Maintenance of Roads and Highways

Permit Requirement

Practices for operating and maintaining public streets, roads and highways, including rest areas, to reduce stormwater runoff impacts.

Summary of Compliance Activities

Clark County maintained roads and streets according to schedules and standards established for the approved NPDES stormwater management program. Public Works Operations Division and Parks Maintenance Section follow standards and practices in the Water Quality BMPs for Operation and Maintenance of Publicly Owned Property manual. The manual was adopted as policy in July 2000 for the use of pesticides and fertilizer on county lands and by Public Works for road maintenance activities.

2002 Compliance Measures for Road and Street Maintenance

Facility/Activity	NPDES-Required Activity	Performance Measures	# Activities Completed
Sweeping Streets	Residential 9 x/yr.; arterial 12 x/yr.	# arterial sweeper sections # neighborhood sweeper sections # times each arterial section swept # times each neighborhood section swept percent compliance	40 42 14 9 100 percent
Spill Response- stormwater facilities	Procedures in place	# of kits in vehicles # of vehicles percent of vehicles w/spill kits # of spills reported to Ecology	158 170 93 percent 4
Litter Removal	4 x/yr. On arterials, as needed	# times litter picked up on arterial roads	227
Roadside Ditches/Culverts	Preventative Maintenance on all	# ditches inspected # ditches cleaned # culverts inspected # culverts cleaned	all inspected 8 percent all inspected 8 percent

S5.B.8.e. Consideration of Water Quality in Flood Control Projects

Permit Requirement

A program to include water quality management considerations into flood management projects, including a schedule for retrofitting existing projects to the extent possible.

Summary of Compliance Activities

Clark County flood control projects are limited to small drainage maintenance and repair activities. The projects include stream-bank erosion control and water quality treatment where feasible. There were few drainage projects during the reporting period and none of a scale that made it feasible to add water quality retrofits.